U.S. Application No.: 10/772,417

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A screen comprising:

a first lens for converting incident light into near-parallel light;

a second lens comprising a horizontal array of vertical cylindrical lenses for horizontally

emitting light, in which vertical stripes absorbing visible light are formed in parallel on

connection portions for the vertical cylindrical lenses; and

a light diffusion film comprising a vertical array of horizontal cylindrical lenses for

vertically emitting light, in which horizontal stripes absorbing visible light are formed in parallel

on connection portions for the horizontal cylindrical lenses, and

the light diffusion film further comprising one or more darkened areas of one or more

shapes on an exit face.

2. (original): The screen according to claim 1, wherein each of the horizontal

cylindrical lenses of the light diffusion film comprises a spherical entrance face and a flat exit

face.

3. (currently amended): The screen according to claim 1, wherein each of the

horizontal cylindrical lenses of the light diffusion film comprises a non-spherical entrance face

of which cross section at a vertical plane is not a circle or a partial circle, and a flat exit face.

4. (original): The screen according to claim 1, wherein the light diffusion film is

made of polyethylene terephthalate (PET) or polycarbonate (PC).

2

U.S. Application No.: 10/772,417

5. (original): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a spherical face.

- 6. (currently amended): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a non-spherical face of which cross section at a horizontal plane is not a circle or a partial circle.
- 7. (original): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a spherical entrance face comprising a first curvature and a spherical exit face comprising a second curvature, wherein the first curvature and the second curvature are different.
- 8. (currently amended): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a spherical entrance face comprising a first curvature and a non-spherical exit face comprising a second curvature, wherein the first curvature and the second curvature are different, and a cross section at a horizontal plane is not a circle or a partial circle.
- 9. (currently amended): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a non-spherical entrance face comprising a first curvature and a spherical exit face comprising a second curvature, wherein the first curvature and the second curvature are different, and a cross section at a horizontal plane is not a circle or a partial circle.
- 10. (currently amended): The screen according to claim 1, wherein each of the vertical cylindrical lenses of the second lens comprises a non-spherical entrance face comprising a first curvature and a non-spherical exit face comprising a second curvature, wherein the first

U.S. Application No.: 10/772,417

curvature and the second curvature are different, and a cross section at a horizontal plane is not a circle or a partial circle.

- 11. (original): The screen according to claim 1, wherein the second lens comprises a light-diffusing agent.
- 12. (original): The screen according to claim 1, further comprising a protective filter disposed on a projection light path of the second lens to protect the screen.
- 13. (original): The screen according to claim 12, wherein the protective filter is coated with an anti-reflective material.
- 14. (original): The screen according to claim 12, wherein the protective filter is laminated on the light diffusion film.
- 15. (original): The screen according to claim 1, wherein the light diffusion film is disposed between the first lens and the second lens.
- 16. (original): The screen according to claim 1, wherein the second lens is disposed between the first lens and the light diffusion film.
 - 17. (currently amended): A projection television comprising:

an illuminating optical system for generating light;

an image optical system for converting light output from the illuminating optical system into an image according to an applied image signal;

a projection optical system for projecting the image; and

a screen for displaying an image created by a light projected from the projection optical system, the screen comprising: a Fresnel lens sheet for converting incident light into near-parallel light; a lenticular lens sheet comprising a horizontal array of vertical cylindrical lenses for

U.S. Application No.: 10/772,417

horizontally emitting light, in which vertical black stripes are formed in parallel on connection portions for the vertical cylindrical lenses; and

a light diffusion film comprising a vertical array of horizontal cylindrical lenses for vertically emitting light, in which horizontal black stripes are formed in parallel on connection portions for the horizontal cylindrical lenses, and

the light diffusion film further comprising one or more darkened areas of one or more shapes on an exit face.

- 18. (original): The projection television according to claim 17, wherein each of the horizontal cylindrical lenses of the light diffusion film comprises a spherical entrance face and a flat exit face.
- 19. (currently amended): The projection television according to claim 17, wherein each of the horizontal cylindrical lenses of the light diffusion film comprises a non-spherical entrance face of which cross section at a vertical plane is not a circle or a partial circle, and a flat exit face.
- 20. (original): The projection television according to claim 17, wherein the light diffusion film is made of polyethylene terephthalate (PET) or polycarbonate (PC).
- 21. (original): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a spherical face.
- 22. (currently amended): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a non-spherical face of which cross section at a horizontal plane is not a circle or a partial circle.

U.S. Application No.: 10/772,417

- 23. (original): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a spherical entrance face comprising a first curvature and a spherical exit face comprising a second curvature, wherein the first curvature and the second curvature are different.
- 24. (currently amended): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a non-spherical entrance face comprising a first curvature and a spherical exit face comprising a second curvature, wherein the first curvature and the second curvature are different, and a cross section at a horizontal plane is not a circle or a partial circle.
- 25. (currently amended): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a spherical entrance face comprising a first curvature and a non-spherical exit face comprising a second curvature, wherein the first curvature is different from the second curvature, and a cross section at a horizontal plane perpendicular to a height of the vertical cylindrical lenses of the exit face is not a circle or a partial circle.
- 26. (currently amended): The projection television according to claim 17, wherein each of the vertical cylindrical lenses of the lenticular lens sheet comprises a non-spherical entrance face comprising a first curvature and a non-spherical exit face comprising a second curvature, wherein the first curvature is different from the second curvature, and a cross section at a horizontal plane perpendicular to a height of the vertical cylindrical lenses of the exit face is not a circle or a partial circle.

U.S. Application No.: 10/772,417

- 27. (original): The projection television according to claim 17, wherein the lenticular lens sheet comprises a light-diffusing agent.
- 28. (original): The projection television according to claim 17, further comprising a protective filter disposed on a projection light path of the lenticular lens sheet to protect the screen.
- 29. (original): The projection television according to claim 28, wherein the protective filter is coated with an anti-reflective material.
- 30. (original): The projection television according to claim 29, wherein the protective filter is laminated on the light diffusion film.
- 31. (original): The projection television according to claim 17, wherein the light diffusion film is disposed between the Fresnel lens sheet and the lenticular lens sheet.
- 32. (original): The projection television according to claim 17, wherein the lenticular lens sheet is disposed between the Fresnel lens sheet and the light diffusion film.
- 33. (original): The screen according to claim 1, wherein the first lens comprises a Fresnel lens sheet and the second lens comprises a lenticular lens sheet.
- 34. (original): The screen according to claim 1, wherein the vertical stripes and the horizontal stripes are black stripes.
- 35. (new): The screen according to claim 1, wherein the one or more darkened areas are black.
- 36. (new): The screen according to claim 1, wherein one of the shapes of the one or more darkened areas is polygonal.

U.S. Application No.: 10/772,417

- 37. (new): The screen according to claim 1, wherein one of the shapes of the one or more darkened areas is circular.
- 38. (new): The screen according to claim 1, wherein one of the shapes of the one or more darkened areas is a stripe.
- 39. (new): The projection television according to claim 17, wherein the one or more darkened areas are black.
- 40. (new): The projection television according to claim 17, wherein one of the shapes of the one or more darkened areas is polygonal.
- 41. (new): The projection television according to claim 17, wherein one of the shapes of the one or more darkened areas is circular.
- 42. (new): The projection television according to claim 17, wherein one of the shapes of the one or more darkened areas is a stripe.
- 43. (new): The screen according to claim 1, wherein the light diffusion film is formed on an area of the second lens.
- 44. (new): The projection television according to claim 17, wherein the light diffusion film is formed on areas of the lenticular lens sheet.
- 45. (new): The screen according to claim 1, wherein the one or more darkened areas on the exit face of the light diffusion film are formed by a photolithography process, wherein

a transmissive film is formed on the exit face;

a photoresist is deposited on the transmissive film;

areas of the photoresist are exposed to light refracted by the exit face;

transmissive film on areas exposed to light is removed using a developing solution, and

U.S. Application No.: 10/772,417

ink is absorbed in areas that contain transmissive film.

46. (new): The projection television according to claim 17, wherein the one or more darkened areas on the exit face of the light diffusion film are formed by a photolithography process, wherein

a transmissive film is formed on the exit face;

a photoresist is deposited on the transmissive film;

areas of the photoresist are exposed to light refracted by the exit face;

transmissive film on areas exposed to light is removed using a developing solution, and ink is absorbed in areas that contain transmissive film.